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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,936	08/02/2001	Madhu Rao	81862P248	8366
8791 7590 11/09/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER SURVILLO, OLEG	
			ART UNIT 2142	PAPER NUMBER
			MAIL DATE 11/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/921,936

Applicant(s)

RAO ET AL.

Examiner

Oleg Survillo

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-81 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Action is responsive to the amendment filed on October 9, 2007. Claims 1-81 are pending in the application. Claims 1, 3, 4, 7-12, 16, 24, 25, 27-48, 56, 57, 59-64, 67, 68, 71, 72, 75, 76, 79, and 80 are amended herein. No claims have been canceled. No new claims have been added.

Response to Arguments

2. With regard to the Applicants' remarks filed on October 9, 2007:

Regarding the objection to specification, the amendment has been fully considered and is sufficient. Therefore, the objection has been withdrawn.

Regarding the rejection of claims 33-48 under 35 U.S.C. 101 as being directed to non-statutory subject matter, the amendment and arguments have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

Regarding the rejection of claims 3-4, 7-12, 24-25, 27-32, 40-41, 43-48, 56-57, 59-64, 67-68, 71-72, 75-76 and 79-80 under 35 U.S.C. 112, second paragraph, as having an insufficient antecedent basis, the arguments and amendments have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

Regarding the rejection of claims 33-48 under 35 U.S.C. 112, second paragraph, as being ambiguous, the arguments and amendments have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

Regarding the rejection of claims 1-81 under 35 U.S.C. 102(a) as being anticipated by Cisco document (Cisco Publication: Frame Relay ELMI Address Registration, posted on Dec. 6, 2000), Applicants' declarations under 37 CFR 1.132 to establish that the subject matter of the Cisco Document relied on in the rejection of claims 1-81 was derived from the applicants rather than being invented by the author of the Cisco Document and arguments were considered but they are not persuasive for the reasons stated below. Therefore, the rejection is maintained.

Response to Declaration under 37 CFR 1.132

The two separate declarations under 37 CFR 1.132 of inventors Madhu Rao and Srikanthkumar Hosakote filed on October 9, 2007 to establish that the subject matter of the Cisco Document relied on in the rejection was derived from the applicants rather than being invented by the author of the Cisco Document are insufficient to overcome the rejection of claims 1-81 based upon the Cisco Document as set forth in the last Office action because:

The declaration refers only to invention, not to claims. It refers only to the system and method described in the above referenced application and not to the individual claims of the application. As such the declaration does not show that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP 716

In particular, applicants stated that Exhibit B (Office action dated June 6, 2007 of the above-referenced application) describes the relevant subject matter of Exhibit A. It appears that applicants attempted to show that since Office action describes the

relevant subject matter of Exhibit A, the Cisco Document is commensurate in scope with the claims. Also, applicants attempted to show that since the Cisco Document was derived from the ELMI Protocol Document (Exhibit C), the ELMI Protocol Document is commensurate in scope with the claims. However, applicants did not affirm that examiner's interpretation of the Cisco Document used to in the rejection of claims 1-81 is correct.

Comment Regarding Examination

In order to further prosecution of the above-referenced application the examiner provides the following comments regarding independent claim 1.

As to claim 1, it is being noted that there is no functional language that would link the claimed limitations, such that a local area network management system (LMS), wide area network management system (WMS) and address registration information are essentially separate elements wherein each one is not required for the other one to function properly. Address registration information that is appended to a message does not seem to require LMS or WMS, or both, as presently claimed. The examiner brings applicants' attention to paragraph [0015] of the specification that appears to provide the functional language linking LMS, WMS and address registration information.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 recites the limitations "the first router" and "the first switch" in line 8.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-81 are rejected under 35 U.S.C. 102(a) as being anticipated by Cisco document (Cisco Publication: Frame Relay ELMI Address Registration, posted on Dec. 6, 2000).

As to claim 1, Cisco document shows a system, comprising:

a local area network management system to manage and configure a network of routers comprising Network Management System (NMS) (page 2, under section Feature Overview and Fig. 1),

a wide area network management system to manage and configure a network of switches comprising Network Management System (NMS) (page 2, under section Feature Overview and Fig. 1), and

address registration information to be appended to a message sent between a first router of the network of routers and a first switch of the network of switches over a connection between the first router and the first switch (page 2, under section Feature Overview and Fig. 1).

As to claim 2, Cisco document shows that the address registration information comprises an interface index (page 2, under Feature Overview, line 4).

As to claim 3, Cisco document shows that the interface index comprises a slot number from which the appended message was sent comprising enabling ELMI on the Cisco router and Cisco switch, which configures the slot number in the interface index (under Prerequisites and Table 1).

As to claim 4, Cisco document shows that the interface index comprises a port number from which the appended message was sent comprising enabling ELMI on the Cisco router and Cisco switch, which configures the port number in the interface index (under Prerequisites and Table 1).

As to claim 5, Cisco document shows that the address registration information comprises an Internet Protocol address (under Feature Overview, line 4).

As to claim 6, Cisco document shows that the address registration information comprises spare bytes wherein spare bytes are the last 6 bytes of the address registration information that follow an IP address information bytes (page 18, sample output following Table 3, and Table 4).

As to claim 7, Cisco document shows that the router sends the appended message (page 2 lines 1-5 and page 8 under Usage Guidelines, "...the first line describes the LMI request that the router has sent to ..." & "... you can use this command to determine whether the router and the (Frame Relay switch) are sending and receiving LMI packets properly ...").

As to claim 8, Cisco document shows that the switch sends the appended message (page 2 lines 1-5 and page 8 under Usage Guidelines, "...the second line describes the LMI reply that the router has received from the switch ..." and "... you can use this command to determine whether (the router) and the Frame Relay switch are sending and receiving LMI packets properly ...").

As to claim 9, Cisco document shows that the appended message is an enhanced local management interface message (page 2 under Feature Overview).

As to claim 10, Cisco document shows that the appended message is sent when the network of switches and the network of routers are first configured (page 2, Fig. 1, "... the first switch and router are first configured and under Prerequisites, "ELMI must be enabled on the Cisco router and Cisco switch").

As to claim 11, Cisco document shows that the appended message is sent when the network of switches or the network of routers has a change in configuration (page 2 under Feature Overview, "... When the management IP address of the switch changes, an asynchronous ELMI version status message is sent to the neighboring device immediately...").

As to claim 12, Cisco document shows that the appended message is sent at a regular interval (page 2, under Feature Overview, "... the NMS 'polls' the devices to collect the connectivity information...").

As to claim 13, Cisco document shows that the local area network management system uses the address registration information to map the network of switches (page 2, under Feature Overview, "With the Frame Relay ELMI Address Registration feature, the NMS can detect switch and router interconnection and create an end-to-end network topology map for network administrators", Table 2, "... yourseen (136) counter maps to the LAST RCVD SEQ counter of the switch...").

As to claim 14, Cisco document shows that the local area network management system configures the network of switches (under Prerequisites, "ELMI must be enabled (configured) on the Cisco switch").

As to claim 15, Cisco document shows that the wide area network management system uses the address registration information to map the network of routers (page 2, under Feature Overview, "With the Frame Relay ELMI Address Registration feature, the NMS can detect switch and router interconnection and create an end-to-end network topology map for network administrators").

As to claim 16, Cisco document shows that the wide area network management system uses the address registration information to map the network of routers (under Configuring the IP address to be Used for ELMI Address Registration Configuration, "... because no other IP address was configured, the router will share an IP address of 0.0.0.0 and a valid ifIndex.>").

As to claim 17, Cisco document shows a method, comprising appending address registration information to a message and sending the message between a router of a router network and a switch of a switch network (pages 2-3, under Feature Overview, and Fig. 1).

Claims 18-32 have similar limitations as claims 1-16, which are directed to switches and routers in the system that makes the interconnectivity including the LAN and WAN. Therefore, claims 18-32 are anticipated by the Cisco document for the same reasons set forth in the rejection of claims 1-16.

As to claim 33, Cisco document shows a machine-readable storage medium tangibly embodying a sequence of instructions executable by the machine to perform a method comprising appending address registration information to a message, and sending the message between a router of a router network and a switch of a switch network comprising enhancing the Cisco Frame Relay MIB to support the new ELMI information and wherein NMS uses the MIB to extract the IP address and ifIndex of devices neighboring the managed device using embedded instructions (pages 2-3 under Feature Overview, and Fig. 1)

Claims 34-48 have similar limitations as claims 17-32, which are directed to a method of appending address registration information to a message, and sending the message between a router of a router network and a switch of a switch network. Therefore, claims 34-48 are anticipated by the Cisco document for the same reasons set forth in the rejection of claims 1-16.

As to claim 49, Cisco document shows a system comprising a switch for appending address registration information to a message and sending the message

between a router of a router network and a switch of a switch network (page 3 under Feature Overview).

Claims 50-64 are directed to a system that has similar limitations incorporating WAN, LAN, NMS, CLI, and ELMI as the system of claims 1-16. Therefore, claims 50-64 are anticipated by the Cisco document for the same reasons set forth in the rejection of claims 1-16.

As to claims 65-80, the devices of a router and a switch that send appended message over a connection that connects the routing unit and the switching unit, have similar limitations as claims 1-16. Therefore, claims 65-80 are anticipated by the Cisco document for the same reasons set forth in the rejection of claims 1-16.

As to claim 81, Cisco document shows a method comprising appending address registration information to a message (under Configuration Examples, "Configuring the IP address to be used for ELMI address registration configuration – The following example shows how to configure the IP address to be used for ELMI address registration. Automatic IP address selection is automatically disabled when the IP address is configured. ELMI is enabled on serial interface 0."), sending the message between a router of a router network and a switch of a switch network (under Feature Overview and Fig. 1), using the address registration information to map the router network from a wide area network management system controlling the switch network

(under Feature Overview, "With the Frame Relay ELMI Address Registration feature, the NMS can detect switch and router interconnection and create an end-to-end network topology "map" for network administrators"), configuring the router network using the wide area network management system (under Benefits, "... using the ELMI protocol and an enhanced MIB, an NMS can now detect connectivity among the switches and routers in a network. This new functionality allows for autodetection of the complete network topology."), using the address registration information to map the switch network from a local area network management system controlling the router network (under Benefits, "... using the ELMI and enhanced MIB, an NMS can now detect connectivity among the switches and the routers in a network. This new functionality allows for autodetection of the complete network topology."), and configuring the switch network using the local area network management system (under Prerequisites, "ELMI must be enabled (configured) on the Cisco switch").

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oleg Survillo whose telephone number is 571-272-9691. The examiner can normally be reached on M-Th 7:30am - 5:00pm; F 7:30am - 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Oleg Survillo

Phone: 571-272-9691



ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER